Panel on Transforming Health Care

Final Report

President's Information Technology Advisory Committee Meeting

February 8, 2001
Sherrilynne Fuller, Co-Chair
Ted Shortliffe, Co-Chair

Overall Goal

- Develop an IT research strategy and rationale to enable the "Transforming the Practice of Health Care" vision of the PITAC February 1999 report
- Inspired by the vision statement in the 1999 report

Panel on Transforming Health Care Members

Co-Chairs:

Sherrilynne S. Fuller, Ph.D.

University of Washington

Edward H. Shortliffe, M.D., Ph.D.

Columbia University

PITAC Members:

Robert E. Kahn, Ph.D.

Corp. for National Research Initiatives

John P. Miller, Ph.D.

Montana State University

Larry Smarr, Ph.D.

University of California - San Diego

Other Panel Members:

Bruce Davie, Ph.D.

Cisco Systems

Don E. Detmer, M.D.

University of Virginia

John Glaser, Ph.D.

Partners HealthCare System

Eric Horvitz, M.D., Ph.D.

Microsoft Research

Takeo Kanade, Ph.D.

Carnegie Mellon University

Sid Karin, Ph.D.

San Diego Supercomputer Center

Russell J. Ricci, M.D.

IBM Corporation

Bonnie Webber, Ph.D.

University of Edinburgh

Summary of Meetings

- Briefings and conference calls with individuals from:
 - —National Library of Medicine
 - —Agency for Healthcare Research and Quality
 - —National Cancer Institute
 - -National Institutes of Health
 - -National Center for Research Resources
 - —Food and Drug Administration
 - —National Science Foundation
 - —Centers for Disease Control
 - —National Center for Health Statistics
 - —Office of the Assistant Secretary for Planning and Evaluation (DHHS)
 - —Office of the Secretary of HHS

Context for the Report

- One goal of our Nation should be a healthy population this is key to attaining other important national goals such as quality of life, a sound economy, and national security. IT can play a crucial role in achieving these goals economically and efficiently.
- Biological research in the new century is an information creation, management, and analysis task. The mandatory role for IT in biomedicine is now unquestioned.
- IT can also help provide better feedback loops for connecting providers, policymakers, and patients with late-breaking research and discussions about clinical decision-making policy.

Findings

- The U.S. lacks a broadly disseminated and accepted national vision for information technology in health care.
- Critical, long-term research, technology, and policy issues need to be addressed if we are to realize the potential of information technology to improve the practice of health care.
- The introduction of integrated decision-support systems that can proactively foster best practices requires enhanced information-technology methods and tools.
- Achieving the potential of information technology to improve health care will be constrained until we develop a larger cadre of researchers and practitioners who operate at the nexus of health and computing/communications.
- The biomedical community, including the Federal research agencies, has tended to rely on information technology innovations that are produced by investments in other parts of Government.
- The role and management of information technology in the Department of Health and Human Services has several limitations, which must be addressed if the health care community is to benefit from the promise of the information age.

Recommendations

- Establish pilot projects and Enabling Technology Centers to extend practical uses of information technology to health care systems and biomedical research.
- Provide a scalable national computing infrastructure to support the biomedical research community that includes the biomedical-computing equivalent of DOE's Accelerated Strategic Computing Initiative (ASCI) program.
- Congress should enact legislation that assures sound practices for managing personally identifiable health information of any kind.
- Establish programs to increase the pool of biomedical research and health care professionals with training at the intersection of health and information technology.
- DHHS should outline its vision for using information technology to improve health care in this country and subsequently devote the necessary resources to do the basic information technology research critical to accomplishing these goals in the long term.
- DHHS should appoint a senior information technology leader to provide strategic leadership across DHHS and focus on the importance of information technology in addressing pressing problems in health care.